

Potential References 10699294

5/9/7 (Item 5 from file: 350)  
DIALOG(R)File 350: Derwent WPIX  
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0007910828 *Drawing available*  
WPI Acc no: 1996-479117/199648  
XRPX Acc No: N1996-404069

**Multiplexing and demultiplexing of analog message telephone service signal and ADSL datastream - multiplexing signals for transmission on twisted pair line, and converting signals to digital form and embedding in ADSL datastream**

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Patent Family ( 7 patents, 17 countries )

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
EP 740451	A1	19961030	EP 1995201040	A	19950424	199648	B
AU 199650657	A	19961107	AU 199650657	A	19960415	199701	E
AU 706604	B	19990617	AU 199650657	A	19960415	199935	E
DE 29522183	U1	20000615	DE 29522183	U	19950424	200035	E
			EP 1995201040	U	19950424		
EP 740451	B1	20010606	EP 1995201040	A	19950424	200133	E
ES 2158035	T3	20010901	EP 1995201040	A	19950424	200161	E
DE 69525238	E	20020314	DE 69525238	A	19950424	200226	E
			EP 1995201040	A	19950424		

**Alerting Abstract EP A1**

The method for multiplexing and **demultiplexing** an analog **message telephone** service (MTS) **signal** (TS) comprising an analog speech signal (AS) as well as telephone service signalling (TSS) and an asymmetric **digital subscriber line (ADSL)** datastream (AD) for simultaneous **transmission** over a **transmission** line involves digitally converting the analog signal. The digital signal (DS, TSC) is combined with a second signal, and is embedded in the ADSL data stream. The latter is used to generate a transmit signal (S) which is applied to the transmission line (TL).

The demultiplexing process involves splitting the transmission signal into component parts comprising the digital MTS (DS, TSC) and the ADSL signal data stream (AD). The digital message signal is then converted to analog form. In the event of a fault the analog MTS signal is transmitted in its analog form to and/or from the transmission line via independent link lines (L,L')

**ADVANTAGE** - Helps maintain telephone service even when ADSL equipment fails by using alternative path to transmit MTS independently from ADSL appts.

9/9/3 (Item 3 from file: 349)  
DIALOG(R)File 349: PCT FULLTEXT  
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## TRAFFIC QUEUEING FOR REMOTE TERMINAL DSLAMS

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	Country	Number	Kind	Date
Patent	WO	200214979	A2-A3	20020221
Application	WO	2001US24926		20010807
Priorities	US	2000635695		20000810
	US	2000688213		20001016
	US	2000745467		20001226

### English Abstract:

The provided network architecture introduces QoS into the ADN, in a manner that enables the delivery of sophisticated and demanding IP-based services to subscribers (25). The architecture utilizes a switch capable of examining and selectively forwarding packets or frames based on higher layer information in the protocol stack, that is to say on information that is encapsulated in the layer-2 information utilized to define normal connectivity through the network. The switch (19) enables segregation of upstream traffic by type and downstream aggregation of Internet traffic together with traffic from a local vertical services domain. By implementing a two-tier queuing structure in the downstream direction, traffic with a virtual circuit and traffic between the different virtual circuits that are destined for the same downstream DSLAM (17) can be prioritized according to service type and/or Internet Service Provider (11).

### Detailed Description:

The ATU-C type ADSL units II 3 include appropriate **frequency dependent** combiner/splitters, for segregating out the voice telephone traffic. Thus each ADSL unit 113 provides a connection for telephone traffic from the associated line 300 to the POTS switch 103.

The ADSL units 113 in the CO (ATU-Cs) essentially act as modulator/demodulators (modems) for sending and receiving **data** over the subscriber **telephone** lines 30 0. On the network side, each of the ATU Cs 113 connects to the MUX i15. The MLTX i15 multiplexes and **demultiplexes** the upstream and downstream **data** for the **ADSL** modems 113 and provides a connection to a high-speed link i1q. Through lo subtending, the MLJX i15 may also provide a data concentration for the communications over the link i 1 9.